



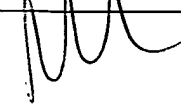
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,021	09/02/2003	Michael John Collins JR.	1700.133	2020
21176	7590	09/20/2004	EXAMINER	
SUMMA & ALLAN, P.A. 11610 NORTH COMMUNITY HOUSE ROAD SUITE 200 CHARLOTTE, NC 28277			VAN, QUANG T	
			ART UNIT	PAPER NUMBER
			3742	

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/605,021	Applicant(s) COLLINS ET AL. 	
	Examiner Quang T Van	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-30 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 11-18 is/are rejected.
- 7) ☐ Claim(s) 6-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/10/04</u> . | 6) <input type="checkbox"/> Other: ____  |

***Specification***

1. The abstract of the disclosure is objected to because it should avoid using phrases which can be implied, such as, "**is disclosed**", "are disclosed", "the invention relates to" etc. Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 17-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 17, "OLE\_LINK1" recited in lines 9-10 is indefinite. It is unclear what is meant by "OLE\_LINK1". Clarification is needed.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Knapp (US 5,672,316). Knapp discloses a microwave-heatable pressure reactor comprising a microwave source (24) for generating electromagnetic radiation in the microwave frequencies; a microwave cavity (1) in a wave communication with said source for exposing compositions placed therein to microwave radiation; a microwave-

transparent pressure resistant reaction vessel (10) in said cavity (1); a source reservoir for starting materials and related compositions (5,6,14); a pump (4, 7) in communication with said source reservoir (5, 6, 14) for pumping heterogeneous or highly viscous materials from said source to said reaction vessel (10); and pressure-resistant valve (8) between said pump (4, 7) and said reaction vessel (10) for isolating said reaction vessel (10) from said pump (4, 7) and said source (5,6,14) during application of microwave energy to compositions in said vessel (10) and from any resulting high pressures generated therein.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knapp (US 5,672,316) in view of Fagrell et al (US 6,614,010). Knapp discloses substantially all features of the claimed invention except said cavity is selected from the group consisting of single mode and dual mode. Fagrell discloses a cavity is selected from the group consisting of single mode and dual mode (col. 2, lines 45-47). It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize, in Knapp, a cavity is selected from the group consisting of single mode and dual mode as taught by Fagrell in order to provide a high efficiency and uniform energy distributions.

8. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knapp (US 5,672,316) in view of Edwards et al (US 6,273,886). Knapp discloses substantially all features of the claimed invention except said pump being a peristaltic pump. Edwards discloses a pump being a peristaltic pump (col. 36, lines 30-35). It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize, in Knapp, a pump being a peristaltic pump as taught by Edwards in order to control amount of fluid flow to the vessel.

9. Claims 3, 5, 11, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knapp (US 5,672,316) in view of VASSILI KARANASSIOS ET AL, cited by applicant. Knapp discloses substantially all features of the claimed invention except said pump being a peristaltic pump. VASSILI KARANASSIOS ET AL discloses a pump being a peristaltic pump (page 457, par. Instrumentation, lines 1-6). It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize, in Knapp, a pump being a peristaltic pump as taught by VASSILI KARANASSIOS ET AL in order to control amount of fluid flow to the vessel.

10. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knapp (US 5,672,316) in view of Fuhrmann et al (US 3,917,699). Knapp discloses substantially all features of the claimed invention except said pressure-resistant valve being a ball valve. Fuhrmann discloses a pressure-resistant valve being a ball valve (col. 6, line 66). It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize, in Knapp, a pressure-resistant valve being a ball valve as taught by Fuhrmann in order to withstand the high pressure in the system.

11. Claims 6-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. Claims 19-30 are allowed.

13. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not show or suggest the step of releasing pressure from the vessel following desired completion of the chemical reaction, and pumping the reaction products of the discrete portion from the vessel at ambient pressures of between about atmospheric pressure and about 30 PSI following the pressure release as recited in claims 19-30.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang T Van whose telephone number is 703-306-9162. The examiner can normally be reached on 8:00Am 7:00Pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 703-305-5766. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



QV  
September 15, 2004



Quang T Van  
Primary Examiner  
Art Unit 3742